Case management in schools

Benefit-cost estimates updated August 2014. Literature review updated June 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Program Description: Case management involves placing a full-time social worker or counselor in a school to help identify at-risk students' needs and connect students and families with relevant services in and outside of the K–12 system. Three such models have been evaluated and are included in this analysis (in no particular order): Communities in Schools, City Connects, and Comer School Development Program. In practice, each of these models includes other services (such as extended learning time and educator training), but the program evaluations focus on the impact of the case management component.

Benefit-Cost Summary

Program benefits	
Participants	$2,650
Taxpayers	$1,479
Other (1)	$1,084
Other (2)	$39
Total	$5,252
Costs	($248)
Benefits minus cost	$5,005

Summary statistics	
Benefit to cost ratio	$21.21
Benefits minus costs	$5,005
Probability of a positive net present value	66 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2013). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Crime	$0	$0	$0	$0	$0
Labor market earnings (hs grad)	$2,692	$1,148	$1,328	$0	$5,169
Property loss (alcohol abuse/dependence)	$0	$0	$0	$0	$0
Health care (educational attainment)	($42)	$331	($244)	$163	$207
Adjustment for deadweight cost of program	$0	$0	$0	($123)	($123)
Totals	$2,650	$1,479	$1,084	$39	$5,252

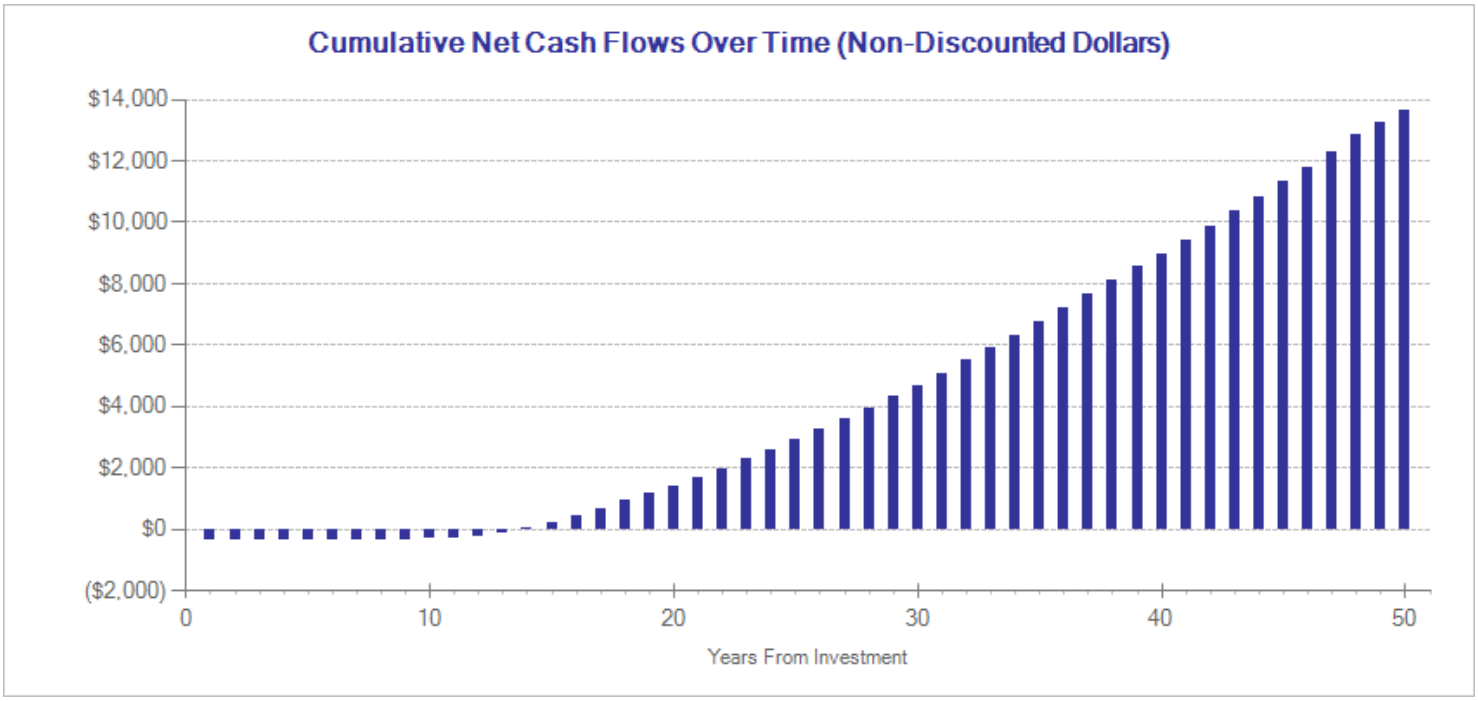
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization and the economic spillover benefits of improvement in human capital outcomes. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$248	1	2013	Present value of net program costs (in 2013 dollars)	($248)
Comparison costs	$0	1	2013	Uncertainty (+ or - %)	10 %

To calculate a per-student annual cost, we use average compensation costs (including benefits) for a social worker as reported by the Office of the Superintendent of Public Instruction, divided by the number of students in a prototypical elementary school and add per-student annual materials, supplies, and operating costs. The estimate also includes a half-hour of principal and administrative support time per week.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
					First time ES is estimated			Second time ES is estimated		
			ES	p-value	ES	SE	Age	ES	SE	Age
Alcohol use before end of middle school	Primary	3	0.032	0.705	0.002	0.085	12	0.002	0.085	18
School attendance	Primary	9	-0.002	0.966	-0.002	0.045	12	0.002	0.054	13
Externalizing behavior symptoms	Primary	1	-0.325	0.044	-0.016	0.161	12	-0.016	0.161	18
Grade point average	Primary	7	0.078	0.238	0.033	0.066	12	0.115	0.148	13
High school graduation	Primary	3	0.048	0.583	0.040	0.089	18	0.040	0.089	18
Internalizing symptoms	Primary	4	-0.030	0.075	-0.002	0.075	12	-0.002	0.075	18
Cannabis use before end of middle school	Primary	3	0.013	0.880	0.001	0.085	12	0.001	0.085	18
Office discipline referrals	Primary	2	0.194	0.192	0.194	0.149	12	0.141	0.162	13
Illicit drug use before end of middle school	Primary	4	-0.034	0.654	-0.002	0.075	12	-0.002	0.075	18
Test scores	Primary	11	0.023	0.533	0.009	0.037	12	0.007	0.041	17
Smoking before end of middle school	Primary	3	0.015	0.862	0.001	0.085	12	0.001	0.085	17

Citations Used in the Meta-Analysis

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For further information, contact:
(360) 586-2677, institute@wsipp.wa.gov

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